BASIC LIST OF MACHINERY, EQUIPMENT AND TOOLS FOR WORKSHOP

(Mechanical only)

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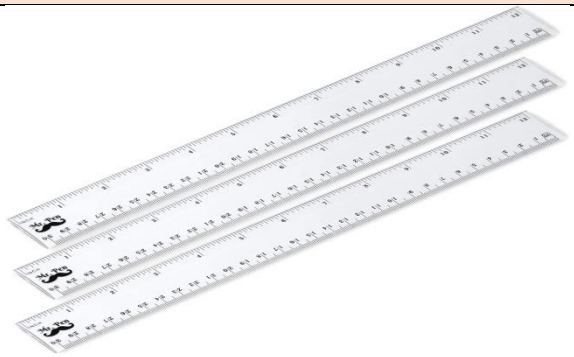
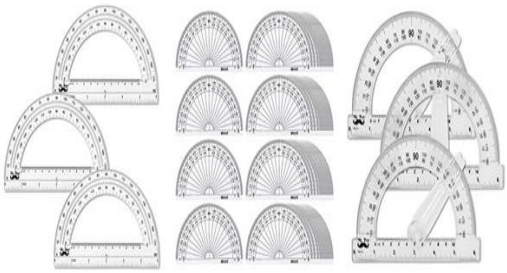
ESSTI SSERD

JUNE 28/2021

PART-ONE

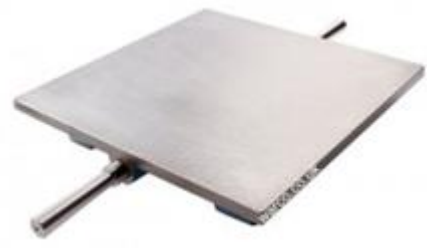
Machinery, Equipment and tools required for Engineering Domains

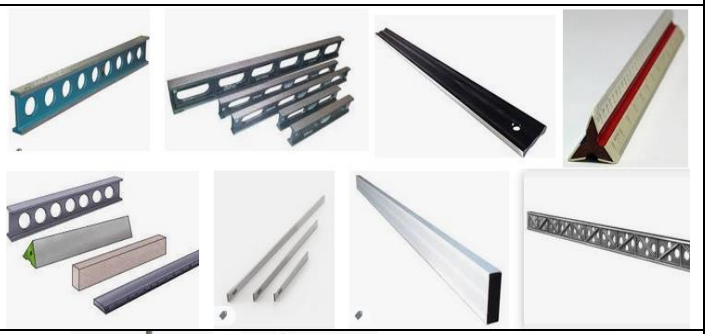
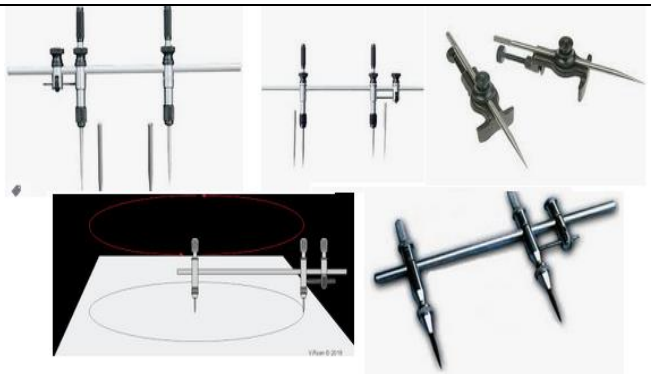
WORKSHOP BASIC EQUIPMENTS				
S/N	**DESCRIPTION**	**PURPOSE**	**PRICE(Br)**	**REMARK**
1	Rulers RECOMMENDED	*A ruler, sometimes called a rule or line gauge, is a device used in geometry and technical drawing, as well as the engineering and construction industries, to measure distances or draw straight lines.*	10	 **SIZE** 200mmx32mm
2	Spring calipers RECOMMENDED	*Nut and are known as spring calipers, while those on the left are an illustration of firm-joint calipers, which are held in place by friction at the joint. Outside calipers measure thicknesses and outside diameters of objects; inside calipers measure hole diameters and distances between surfaces.*	900	 **SIZE** Code / Size (L) / Range (W) 7262-150 / 155mm / 0-140mm 7262-200 / 210mm / 0-210mm 7262-250 / 265mm / 0-270mm 7262-300 / 310mm / 0-320mm

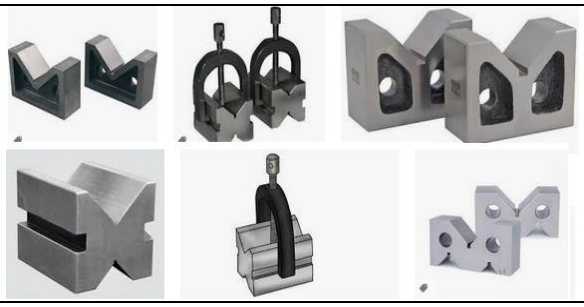
3	Steel tapes/Tape measures RECOMMENDED	*A tape measure or measuring tape is a flexible ruler used to measure size or distance. It consists of a ribbon of cloth, plastic, fibre glass, or metal strip with linear-measurement markings*	250	
4	Calipers RECOMMENDED	*A caliper is a device used to measure the dimensions of an object. Many types of calipers permit reading out a measurement on a ruled scale, a dial, or a digital display.*	400/pcs	
5	Protractors RECOMMENDED		120/pcs	
6	Thermometers RECOMMENDED	*A thermometer is a device that measures temperature or a temperature gradient.*	80/pcs	
7	Mass balances RECOMMENDED		1200/pcs	

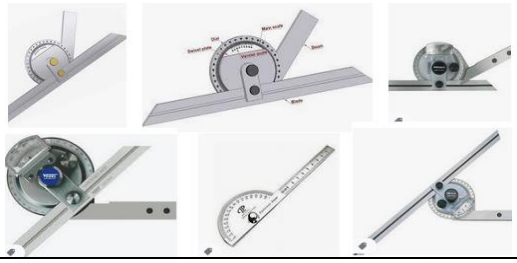
8	Stop watches RECOMMENDED		200/pcs	
9	Spirit levels RECOMMENDED		400/pcs	
10	Plumb bobs OPTIONAL	*A plumb bob, or plummet, is a weight, usually with a pointed tip on the bottom, suspended from a string and used as a vertical reference line, or plumb-line.*	600/pcs	
11	Heavy Duty Vernier Caliper OPTIONAL		2300/pcs	 ***0-500mm x 250mm long***

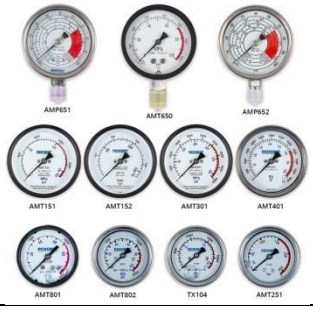
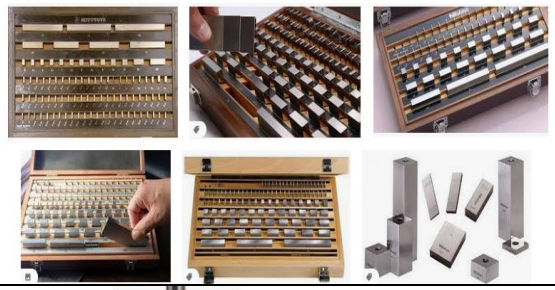
12	Joint calipers RECOMMENDED		200/pcs	
13	Micrometers RECOMMENDED		515/pcs	
14	Centre pin punches RECOMMENDED			
15	Centre punches sets RECOMMENDED			
16	Dial gauges OPTIONAL			

17	Dial test indicators OPTIONAL			
18	Height gauges RECOMMENDED			
19	Surface tables OPTIONAL			
20	Steel rulers RECOMMENDED			
21	Mark-out tables OPTIONAL			

22	Engineer's squares RECOMMENDED			
23	Straight edges OPTIONAL			
24	Scribing blocks RECOMMENDED			
25	Trammels OPTIONAL			
26	Scribers RECOMMENDED			

27	Vee blocks OPTIONAL			
28	Parallels OPTIONAL			
29	Angle plates OPTIONAL			
30	Dividers RECOMMENDED			
TOTAL-1			**13670.00 Birr/pcs/set**	

WORKSHOP BASIC EQUIPMENTS				
S/N	**DESCRIPTION**	**PURPOSE**	**PRICE**	**REMARK**
31	Gear tooth verniers OPTIONAL			
32	Bevel protractors OPTIONAL			
33	Thread measuring Equipment OPTIONAL			 Thread Measuring bowersgroup.co.uk 3-Wire Thread Measuring Set shop.mitutoyo.eu
34	2D optical OPTIONAL		**170000.00**	 2D Optical Measuring Device ... leader-precision.en.made-in-chi...
35	Comparators (profile projectors) OPTIONAL			

36	Computer controlled height OPTIONAL		365,400.00	
37	Gauges OPTIONAL			
38	Sine bars OPTIONAL			
39	Gauge blocks RECOMMENDED			
40	Length bars RECOMMENDED			

41	Digital level RECOMMENDED			
42	Digital indicator OPTIONAL			
43	Transducers OPTIONAL			
44	CMM technology (coordinate measuring machine) OPTIONAL			

45	Surface grinder OPTIONAL		55,530	
46	Pan folders OPTIONAL		60,000.00	
47	Guillotine(for shear) RECOMMENDED		1200.00	

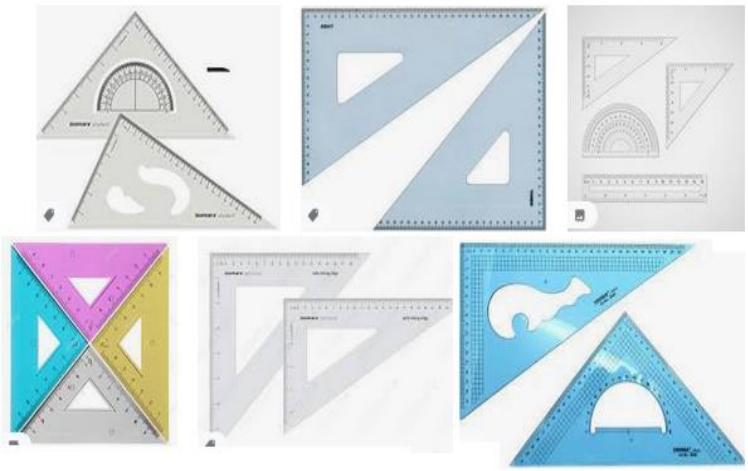
48	Sheet Rollers OPTIONAL		4725	
49	Croppers RECOMMENDED		225.00	
50	Swage and Jenny wheels OPTIONAL		38250.00	

51	Press brake OPTIONAL		90,000.00	
52	Cutoff saws RECOMMENDED		13,500.00	
53	Drop saws RECOMMENDED		4545.00	
54	Jig saw RECOMMENDED		4123.00+	

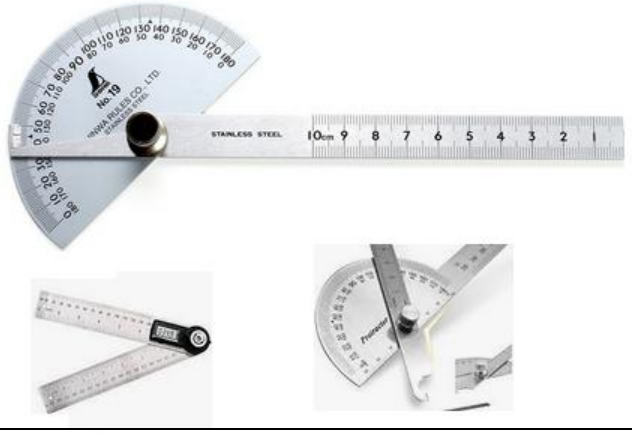
54	Band saws/bevellers OPTIONAL		6795.00+	
55	Shears RECOMMENDED		890+	
56	Workshop Nibblers RECOMMENDED		34567.00+	

57	Circle cutters OPTIONAL		1755.00	
58	Hole punches RECOMMENDED			
59	Drills RECOMMENDED		2256.00+	
60	Angle grinders RECOMMENDED		2655+	

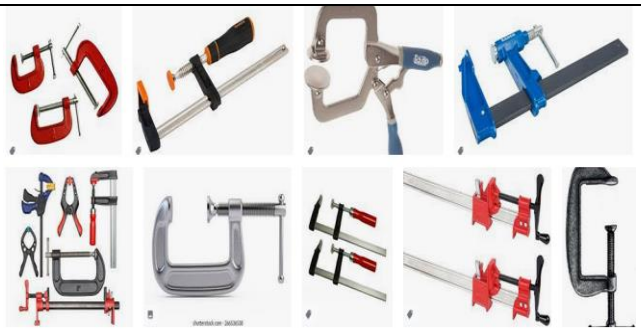
62	Files RECOMMENDED		2700/set	
63	Hacksaws RECOMMENDED		67.00	
64	Taps and dies RECOMMENDED		855	

65	Reamers RECOMMENDED		405.00/pcs *Differs according to type & size*	
66	Hammers drills RECOMMENDED		8055.00	
67	Set squares RECOMMENDED		20.00/pcs	
TOTAL-2				

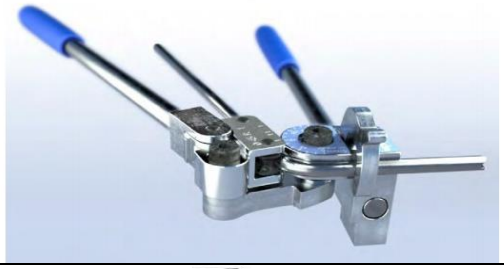
WORKSHOP BASIC EQUIPMENTS				
S/N	**DESCRIPTION**	**PURPOSE**	**PRICE**	**REMARK**
68	Radius/beam gauges RECOMMENDED		180.00	
69	Feeler gauge RECOMMENDED		135.00	
70	Combination RECOMMENDED		45.00	
71	Chalk line OPTIONAL		315.00	 IRWIN STRAIT-LINE Chalk Line, C... amazon.com Schlagschnur sola.at 100 ft FATMAX® Chalk Lin... stanleytools.ca How To Use A Chalk Line... familyhandyman.com IRWIN STRAIT-LINE Ch... grainger.com · In stock

72	Angle meters RECOMMENDED		60.00+	
73	Digital angle meters OPTIONAL		2642.51	
74	Spanners RECOMMENDED		176.17/set	
75	Combination spanner RECOMMENDED		322.00/set	
76	Box spanner RECOMMENDED		130.00/set	

77	Flare nut spanner RECOMMENDED		1600.00/set	
78	Ring spanner RECOMMENDED		2205.00	
79	Adjustable spanner RECOMMENDED		99.80	
80	Pipe socket wrench RECOMMENDED		155.00	
81	Ratchet RECOMMENDED		1035.00	

82	Clamps RECOMMENDED		89.00+	
83	Screw driver RECOMMENDED		1500.00/set	
84	Allen keys RECOMMENDED		1120.00/set	

85	Block and tackle (electric hoist) OPTIONAL		6750.00	
86	Rope pulley block and tackle RECOMMENDED		1350.00	
87	Tirfor winch OPTIONAL		3375.00	
88	Recon winch OPTIONAL		39960.00	

89	Hoists and Genie hoist OPTIONAL		4275.00	
90	Coupling machine	OPTIONAL		
91	Tube bending and cutting OPTIONAL		883.32	
	63mm PVC/PPR Pipe Cutter OPTIONAL		360.00	
92	Semi-Automatic Electric Tube Bending Machine, Engraving Speed (55mm/min) OPTIONAL		80000.00+	

93	Manual Operation Metal Pipe Cutting Machine OPTIONAL		52500.00	
94	Flaring and swaging tools OPTIONAL		2565.00	
95	Flare nut tools RECOMMENDED			
96	Vacuum pumps RECOMMENDED		4040.00+	

97	Leak detection OPTIONAL		5805.00	
98	Welding machine RECOMMENDED		6187.36/pcs	Arc Welding Machine, 1-2 Kw, ... indiamart.com Weltech Single Phase ARC Inve... indiamart.com PROMOTOR 250A ARC Welder ... amazon.com
99	Portable welding machine RECOMMENDED		5355.00	
100	Lock picks OPTIONAL		5700 *For multi pick 3 lever*	Dangerfield 8 Piece Beginne... ukbumpkeys.com · In stock Lock picking - Wikipedia en.wikipedia.org 13 Piece Lock Pick Set - PX... lockpicks.com · In stock GHB Lock Pick Set Lockpick... amazon.com.au

101	Electronic or laser technology for leveling OPTIONAL		2835.00	
102	Abney Level OPTIONAL		3510.00	
103	Thermometer RECOMMENDED		900.00	
104	Strobe RECOMMENDED		817.00	
105	Vibration sensor RECOMMENDED		8100.00	

106	Noise meter RECOMMENDED		913.00	
107	PH and chlorine test kit OPTIONAL		441.95	
108	Bore gauge RECOMMENDED			
109	Utility knife RECOMMENDED			

110	Pliers RECOMMENDED			
111	Vise grip RECOMMENDED			
112	Electric operated driver RECOMMENDED			
113	Vice and bench RECOMMENDED			
114	Hammer and mallet RECOMMENDED			

115	Driver set RECOMMENDED			
116	Hot glue gun RECOMMENDED			
117	Supply closet RECOMMENDED			
118	Portable drill machine RECOMMENDED			

119	Hand drill RECOMMENDED			
120	Tool box			
121	Tool case			
122	Tool kit			
GRAND TOTAL COST				